



Urban Forest Strategy 2040

Stage 1: Strategic Directions

Healthy, biodiverse, connected.

October 2023

Prepared for the City of Port Phillip by St Jack & Co

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Acknowledgement of Country

Council respectfully acknowledges the Traditional Owners of this land, the people of the Kulin Nation. We pay our respect to their Elders, past and present. We acknowledge and uphold their continuing relationship to this land.

| Version | Date | Author | Review | Rationale |
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October 2023

Prepared by



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Foreword

The City of Port Phillip is developing a new Urban Forest Strategy with our community in two stages. These Strategic Directions set the vision and guiding principles to 2040 (Stage 1), informing the targets, actions, implementation and evaluation planning (Stage 2) currently in development. Alongside this planning and consultation process, we are continuing our on-ground efforts to care for and expand our urban forest.

Collectively, all trees and plants on public and private land make up our urban forest. This includes trees, shrubs and groundcovers in home gardens, on green roofs, walls and facades, on nature strips, medians and roundabouts, in parks and reserves, and in shopping strips, car parks and industrial areas.

Port Phillip has a heritage of historic parks, public and private gardens, and tree-lined streets that contribute to mature canopy and greening across most neighbourhoods. We want to protect the greening we already have, help it thrive, and take practical action to expand our urban forest within the complexities of our urban environment.

In recent years, the Port Phillip community has consistently raised greening as a major priority for the City. Our community has said that trees and greening are central to their desire for beautiful public spaces, parks and streetscapes, for supporting biodiversity, cooling neighbourhoods, and mitigating against the impacts of a changing climate.

There is no easy solution. As our City continues to grow and densify, competing needs and priorities like housing provision, safety, accessibility, parking, and other critical infrastructure must be managed alongside urban greening. Since 2012, canopy loss on private land has surpassed gains on public land. While there are still some opportunities to expand conventional greening, we must also look for new ways to green our City.

All residents and landholders play an important role in greening our neighbourhoods, as do the many local environmental advocates and groups, who partner with Council to care for green spaces for the benefit of the whole community. Together we can grow a greener Port Phillip.



Looking South-East from Port Melbourne towards Elwood (source City of Port Phillip)

Healthy, biodiverse, connected.

Our 2040 vision

In the City of Port Phillip,
urban greening is healthy
and abundant, biodiversity is
valued and supported, and
nature connects community.

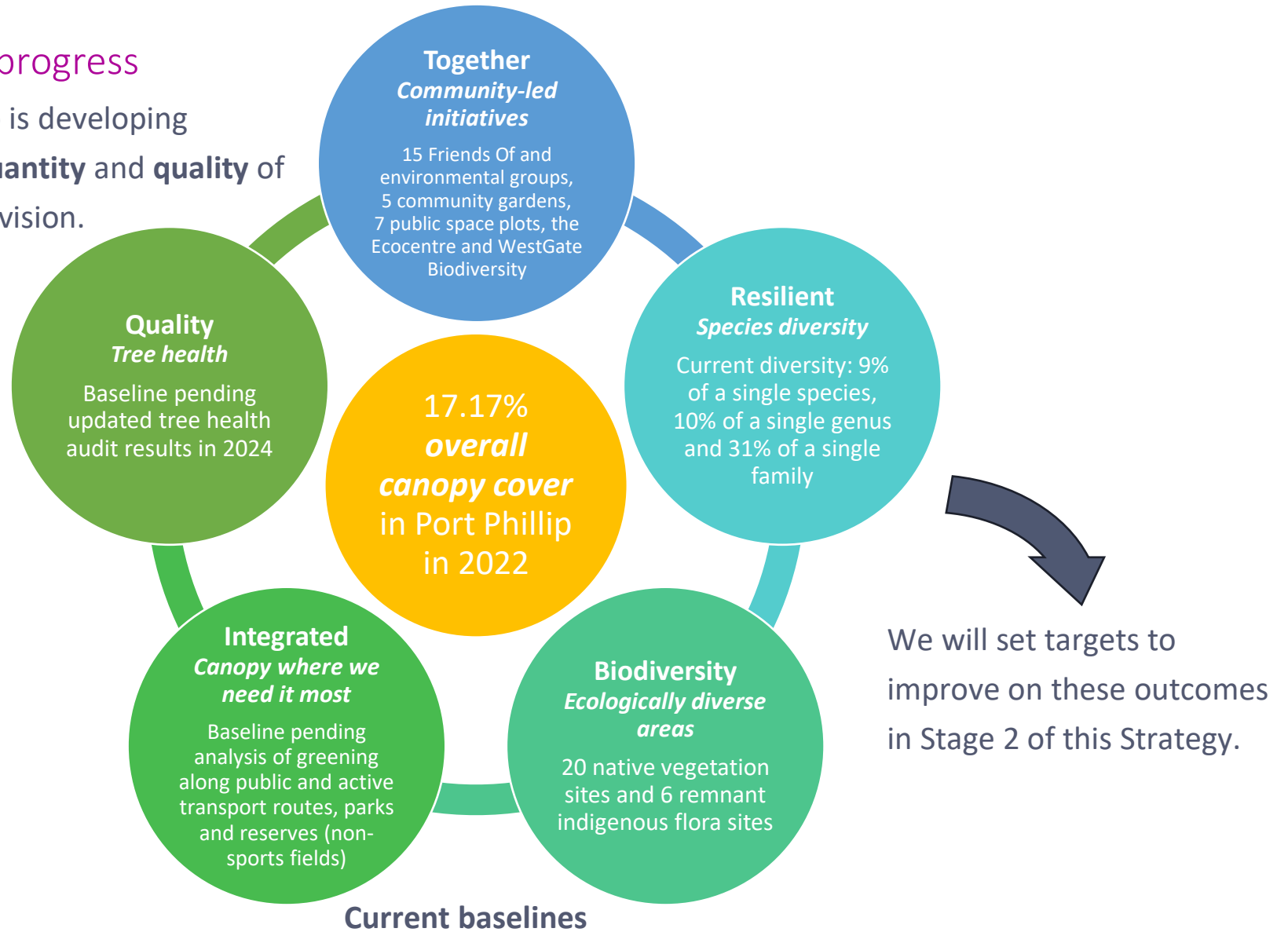
Our shared principles

Collectively with Council, community and industry partners:

1. We work **together** to value, protect, grow and care for healthy and sustainable greening everywhere.
2. We retain first, respecting established character, and adapt by adding more **resilient** plant species where they are most needed to reduce heat and flood vulnerabilities.
3. We prioritise **biodiversity**, supporting healthy ecosystems and creating habitat.
4. We invest in thriving **integrated** urban greening in streetscapes, buildings, parks and gardens.
5. We value the urban forest as a long-term asset that is critical to the health and wellbeing of our community and to our City's character and function, through **quality** design, construction and maintenance.

We will track our progress

The City of Port Phillip is developing targets to track the **quantity** and **quality** of progress towards our vision.



Together

We work together to value, protect, grow and care for healthy and sustainable greening everywhere.

Council manages assets on its own land, including streets, parks and gardens, and can also play a role in expanding greening elsewhere, like in schools, transport corridors, buildings, and on private land. This can be achieved through education, advocacy, policy, guidance, engagement initiatives and partnerships.

Partnerships with volunteers, groups and organisations are critical in achieving our shared urban forest vision. While urban greening is complex due to accessibility and public safety requirements, infrastructure above and below ground, and resourcing, these do not restrict our potential to work together. Raising awareness of the many benefits of nature connection can inspire everyone to be proud custodians of our urban forest.

We acknowledge there are gaps in the distribution of greening across our City, and we aim to close those gaps to achieve greening equity. This may not look the same everywhere. Greening approaches must respond to different soils, microclimates, and neighbourhood character to ensure long-term survival and optimised benefits from new plantings.

Nature education

In the median of Danks Street, lawn has been replaced with a diverse understorey, with indigenous plants, nesting boxes and bird baths to support local bird species, as part of a larger Biolink project. Valued by human and feathered friends alike, local schools are now using the space for environmental education, in partnership with Council.



Danks Street Biolink (source City of Port Phillip)

Resilient

We retain first, respecting established character, and adapt by adding more resilient plant species where they are most needed to reduce heat and flood vulnerabilities.

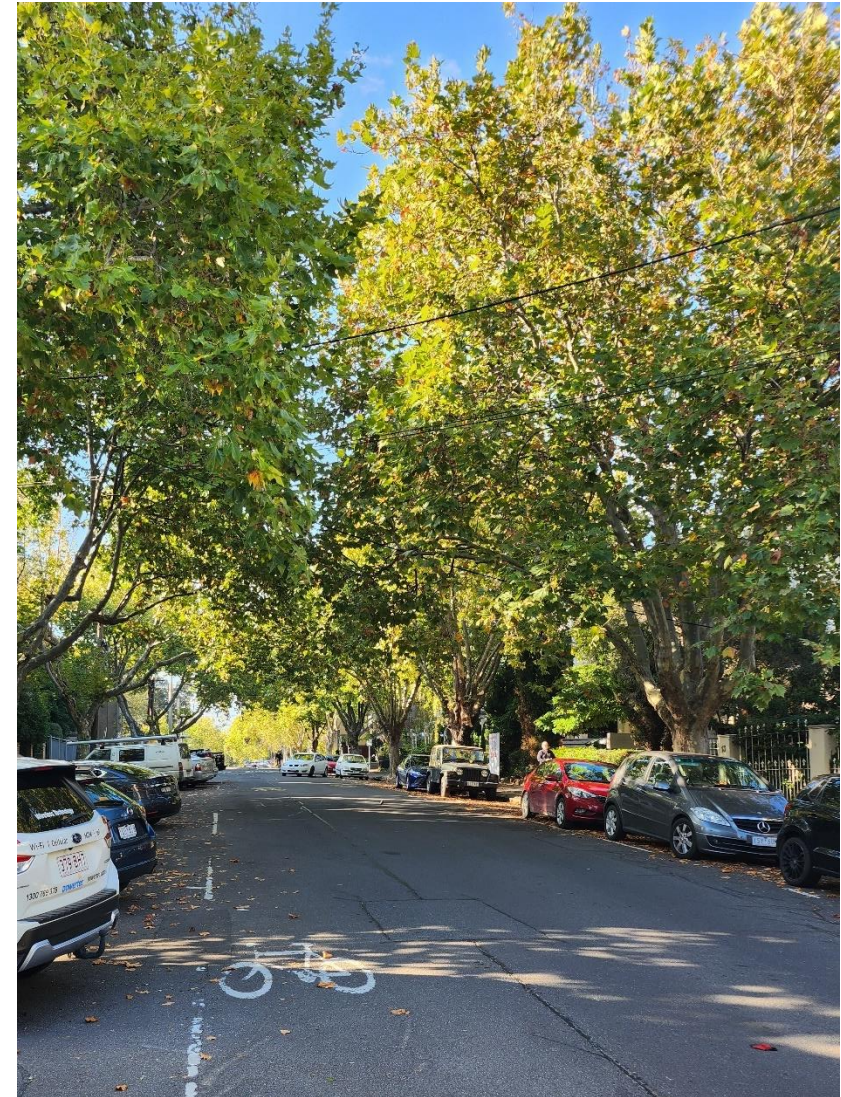
The City of Port Phillip respects established trees, which take many years to grow and provide shade, beauty, and a sense of place. The absolute first priority is to protect established urban forest assets, and to do what is possible to help them thrive. Removal is a last resort. Retaining existing trees minimises capital and maintenance costs, and strengthens our City's climate resilience.

Trees and other plants are community assets for years, decades, and even centuries. As more plants are added, the species and planting compositions selected must be resilient to changing urban environments, limited water and maintenance resources, and future climate conditions.

Greening is being used by cities globally to combat heat and flood risks. With the latest mapping technology, new greening can be prioritised where it is most needed to reduce exposure and vulnerability to extreme heat and flood risks and improve liveability. Strengthening food security with edible gardens is another important factor in growing a resilient city.

Climate ready species

Council arborists are trialling more species for climate resilience. Council is involved in a tree trial program through a major nursery, and is always looking for ways to ensure higher quality and more diverse stock. This includes propagating from plants already thriving in Port Phillip.



Cool canopy trees on Acland Street, St Kilda (source St Jack & Co)

Biodiverse

We prioritise biodiversity, supporting healthy ecosystems and creating habitat.

With a variety of plant species, the urban forest becomes more balanced, resilient and vibrant. This helps ensure a high quality of life for the people and diverse wildlife living here.

Urban forest populations need to be diverse and well-managed to stay healthy and resist extreme heat, drought, pests and diseases. For the urban forest to survive and thrive, it should have 'defensive diversity', with a good mixture of species, age classes, structural sizes, species suitability and functional diversity (eg. habitat, shade, flowering).

Indigenous plant species – those that have evolved to thrive in local conditions – provide crucial habitat for native wildlife, and often have lower maintenance needs. However, the urban environment has changed from its pre-European state, and climate change is further shifting the growing conditions in our City. Exotic species and Australian natives from more arid areas also play a role in a diverse urban forest.

Wildlife is often co-dependent on indigenous plant species, which is why these plants are used to restore habitat in urban areas. Wildlife corridors, also known as biolinks, provide critical pathways for animals to move between habitats to find food, shelter, and mates.

Biodiverse streets

In 2022, works commenced on the Bothwell St Biolink. Large patches of grass were replaced with indigenous plantings in a diverse woody meadow. A community planting day in October 2022 encouraged local residents to join in, with signs continuing to raise awareness about the benefits.



Woody meadow in the Bothwell Street Biolink (source St Jack & Co) (photo to be updated)

Integrated

We invest in thriving integrated urban greening in streetscapes, buildings, parks and gardens.

As our City grows and densifies, the readily available space to add more greening is becoming increasingly scarce. More investment is needed in engineered solutions to integrate greening with grey infrastructure like buildings, roads and utilities, while supporting greening to thrive.

The aim of these integrated solutions is not just to reclaim space for greening, but also to provide the right growing conditions for greening to thrive and deliver maximum benefits. Key to this is allowing greening to access its own supply of water and nutrients, with enough space for roots to flourish without damaging infrastructure.

There are many proven and emerging ways to blend greening with grey infrastructure. These include green walls, rooftop gardens, root barriers, structural soil cells, depaving, in-road tree pits, and passive irrigation with raingardens and permeable paving. These can be complex innovations, or as simple as cutting an opening in a fence for a branch to grow through. Most can be used in both new plantings and retrofits.

Engineered solutions do require additional upfront capital investment. However, these costs can be weighed against the lifecycle benefits of adding greening, maximising the benefits greening can deliver when it thrives, and reducing maintenance requirements.

In-road tree plantings

Some narrow streets don't have enough space on the verge for a tree. One potential solution is to de-pave and add an in-road tree planting. This works well in spaces with room for 'one and a bit' cars, and does not necessarily remove a car park.



Passive Irrigation system for median tree planting in Albert Road (source CoPP)

Quality

We value the urban forest as a long-term asset that is critical to the health and wellbeing of our community and our City's character and function, through quality design, construction and maintenance.

In our City, long-lived trees planted over a century ago continue to provide substantial benefits to us today. We value our urban forest as an essential and enduring asset that contributes greatly to the character, liveability and prosperity of our City, and to the health and wellbeing of our community. Recognising and respecting this, we will take a long-term investment mindset and ensure the quality design, construction and maintenance of our urban forest asset.

In our urban forest, quality is just as important as quantity. Integrated design considers the plant's needs, the needs of other adjacent uses, environmental factors, and the local character. Construction and maintenance considerations include plant selection, site preparation, proper planting techniques, establishment and young tree care, integrated water management, regular inspections, risk management, pest treatments, and ongoing care.



Elwood Foreshore (source City of Port Phillip)

Sunny soil prep

In 2020, sunflowers were planted in Cruikshank Street Reserve to prepare the soil for new trees and landscaping. They reduced soil compaction, removed harmful toxins, and brightened people's day. A diverse meadow with trees has now been planted and is thriving.

Growing a healthy, biodiverse & connected urban forest

Port Phillip was one of the first Australian councils to develop an Urban Forest Strategy in 2010, called Greening Port Phillip. That strategy helped to change the way public trees were managed in the City, and it sparked community recognition of the importance of greening for liveability, prosperity and sustainability.

Since 2010, **the City of Port Phillip has delivered substantial greening action, investment, research and planning to integrate greening into Council plans and operations.** There has been an increased focus on biodiversity and biolinks, more understorey plantings, engineered solutions for passive watering, increased soil volume and greening on buildings, and community-led produce and verge gardening.

Since 2010:

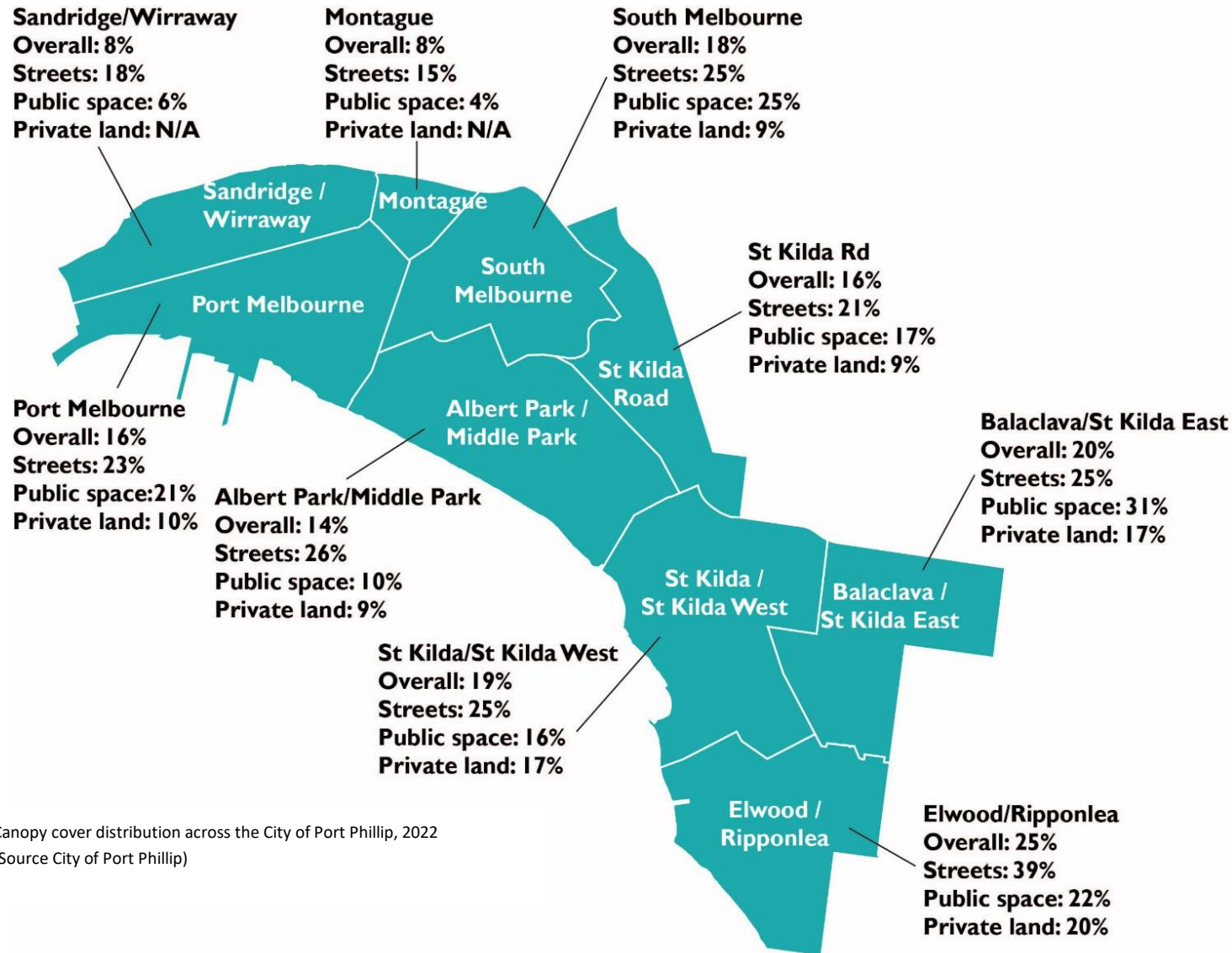
- Tree canopy on public land has increased (+0.6% since 2012).
- Tree canopy loss on private land (-0.9% since 2012) has outstripped those gains, in our growing and increasingly dense City.
- Community awareness of and advocacy about greening has increased.
- The concept of the 'urban forest' has expanded beyond street trees to include all vegetation on public and private land.
- There has been an increased focus on electrical line clearance compliance in Victoria.
- Community-led greening has risen since COVID lockdowns.
- Extreme heat and flood risks have increased as the climate has changed.

It is now time to build on the success of Greening Port Phillip and develop a new strategy for 2040, for an urban forest that is healthy, biodiverse and connected.



Rainbow Lorikeets (source City of Port Phillip)

How tree canopy is distributed across our City now



Canopy cover distribution across the City of Port Phillip, 2022
(Source City of Port Phillip)

In 2022, overall tree canopy cover of the City of Port Phillip was 17.17%.

Overall, public space has tree canopy cover of 13.95%, roads 25.53%, and private land 12.45%.

Canopy cover is not evenly distributed across neighbourhoods or land types. Under the **Together** principle, we aim to address that and achieve greening equity.

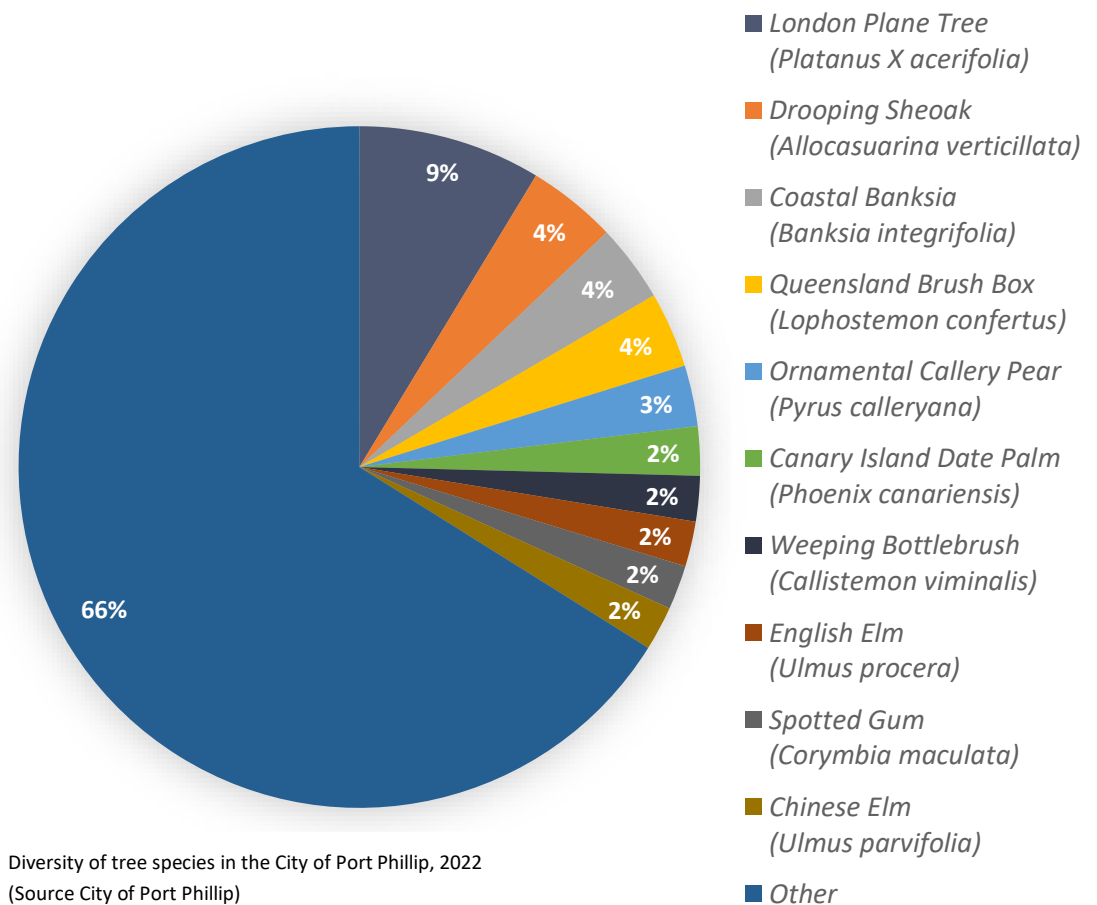
How diverse our urban forest is now

Urban forest health and survival can be at risk long-term (to pests, diseases and other threats) if trees are not managed for 'defensive diversity' through a good mix of species and other factors.

In the public realm, the **City of Port Phillip manages approximately 46,000 trees**, 75% of which are street trees.

Species and genus diversity in the public tree population is generally good, with only one species, the London Plane (*Platanus x acerifolia*), above 5% of the total population.

There are **20 native vegetation sites** (including bio-links) and **six remnant indigenous flora sites** in the City. Biodiversity values are significant, and require protection and enhancement for future generations. Information on the identified species is available in the City of Port Phillip's Biodiversity Report (2020) and foreshore and hinterland vegetation management plans.



Diversity of tree species in the City of Port Phillip, 2022
(Source City of Port Phillip)

A well-informed strategy

Development of the Urban Forest Strategy 2040 is collaborative and evidence based. Key pieces of work so far are listed below.

- *Background and Benchmarking Report 2023*
A detailed evidence base and context for our urban forest, including a summary of relevant research. Includes the strategic and policy context, community values, benefits of urban greening, a description of Port Phillip's urban forest, benchmarking against recent urban forest strategies, identification of best practice and emerging focus areas, and guidance on urban forest indicators and targets.
- *Canopy Mapping & Analysis 2012-2022*
The latest technology has been used to map canopy now, and establish a foundation for monitoring and improvement in future.
- *Mayors Roundtable 2023*
Key stakeholders and advisory groups were invited to a workshop on 21 May 2023, to inform these Strategic Directions.
- *Stage 1 Community Engagement*
Full community engagement was held in July/August 2023 on the Draft Vision and Principles, potential Council and community greening actions, and other general feedback.
- *Vegetation in the Private Realm Report 2022*

If you would like to know more, reports on the above are available at <https://haveyoursay.portphillip.vic.gov.au/urban-forest-strategy>.

Growing into practical action together

Informed by the Port Phillip community, these Strategic Directions have set a shared vision for what we want to achieve, and the principles that will guide the work and decision-making of the City of Port Phillip to 2040.

Next, we are determining what we will do to get there, when and how we will do it, and how we will know it is working. The outcome of this work will be a Targets, Action, Implementation and Evaluation Plan. We are inviting the whole community to inform that plan too.

Meanwhile, practical action continues to be delivered under Council's ongoing Greening Port Phillip program. For example, there are de-paving projects in process as part of the footpath maintenance program reclaiming more space for greening, additional biodiverse plantings are occurring in several public spaces, canopy trees on streets and in public spaces are being planted and we're supporting community to plant in public spaces.

By doing this and more, we can all work together towards a healthy, biodiverse and connected urban forest. We look forward to working with you, and all our community, over the rest of the year as we plan for the future together.

Mayors Roundtable 2023 (source St Jack & Co)



Glossary

Biodiversity / biodiverse

The variety of all plants, animals and microorganisms, their genes, and the ecosystems they live in.

Canopy

The upper level of a tree or trees. In cities this is typically measured for trees tall enough to provide functional shade for people (3m+).

Ecosystem

A community of living organisms interacting with each other in their habitat.

Green space

Vegetated land or water in an urban area including parks, gardens, sporting ovals, bike and walking paths, and urban landscaping.

Habitat

Food, water, shelter and space that supports plant or animal life.

Impervious surface

A hard surface (such as a road or building) that prevents infiltration of water into the ground, causing water to run off the surface.

Integrated water management

Collaborative planning and management of stormwater, wastewater and fresh water to deliver water security, public and environmental health, and urban amenity.

Sustainable

Responsibly managing our current needs without compromising the ability of future generations to meet their needs. This includes social, financial and environmental resources.

Resilient

Able to survive, adapt and thrive no matter what kind of chronic stresses and acute shocks are experienced.

Urban forest / greening

All trees and plants on public and private land.

Urban heat island

The effect of metropolitan areas being hotter than rural areas due to heat absorption and retention in hard surfaces (eg. buildings and pavement).

Understorey

Small and young trees, shrubs and low plantings between the tree canopy and the ground.

Find out more

haveyoursay.portphillip.vic.gov.au/urban-forest-strategy

Landscaping, St Kilda Town Hall (source St Jack & Co)

